

Systems and methods for connecting and configuring a communication network are described. A network includes a first router; a tie-line having a plurality of full duplex dedicated router interconnects connected to said first router; a second router connected to said plurality of full duplex dedicated router interconnects; a first user connected to said first router with a first full duplex loop; and a second user connected to said second router with a second full duplex loop. The systems and methods provide advantages in that bursty control information can be multiplexed with time sensitive laminar data.